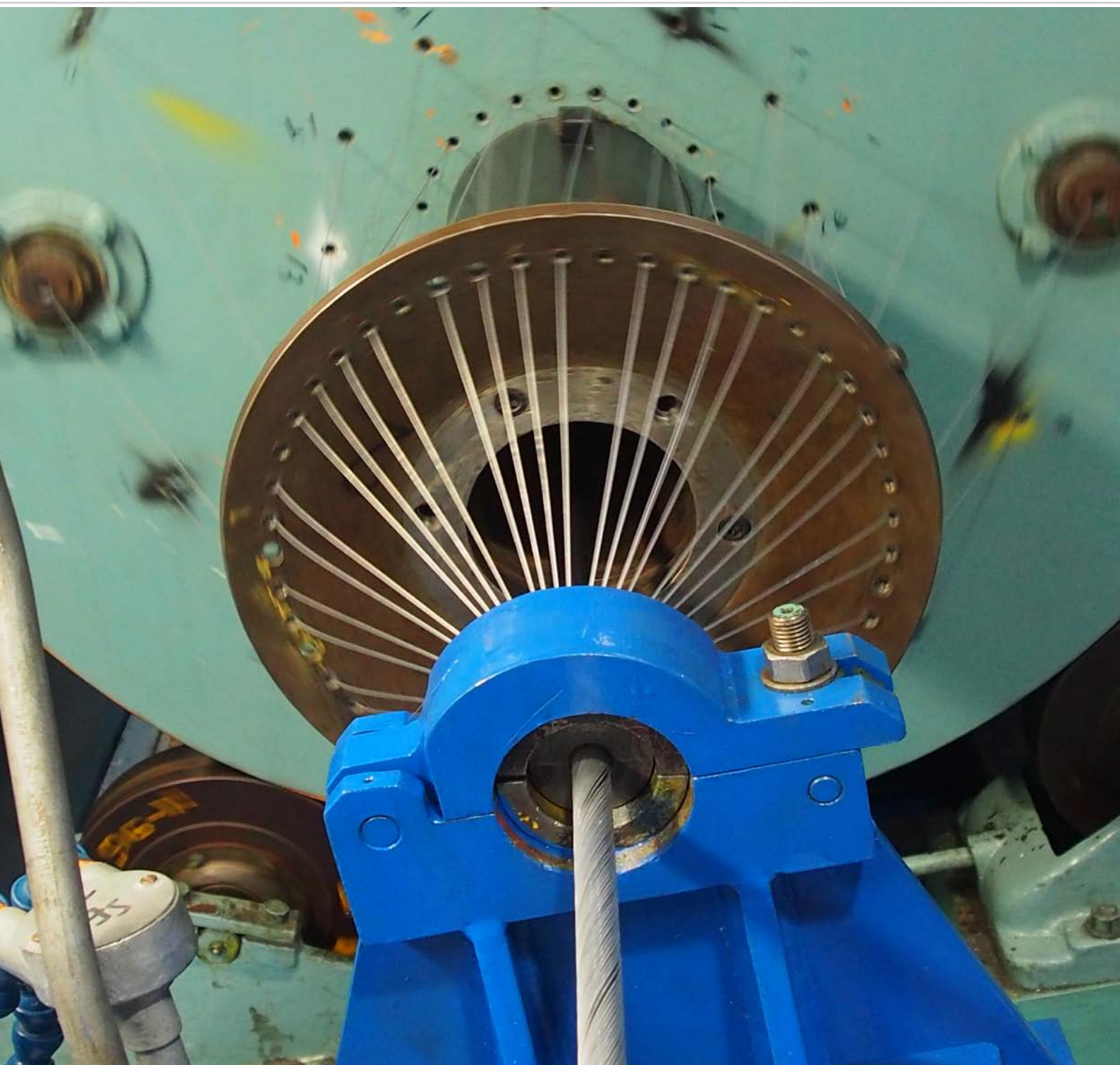




**HYDROCABLE  
SYSTEMS**

## Armoured Cables

### Wire Armouring of Electrical / Optical Cables



## Armoured Cables

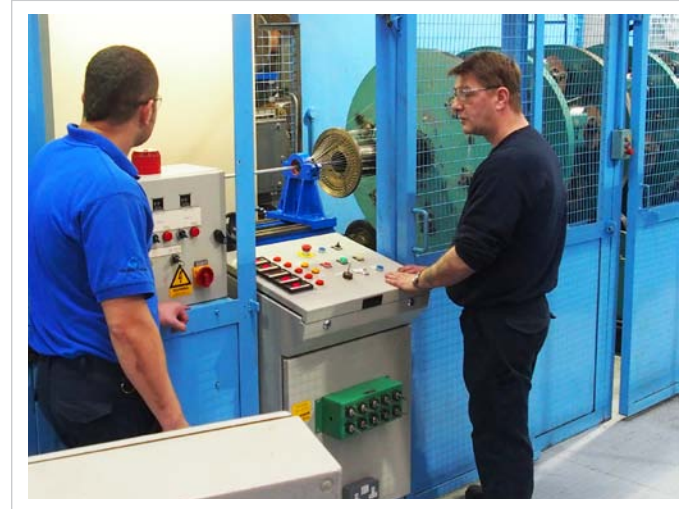
### Wire Armouring of Electrical / Optical Cables

Hydro Cable Systems Ltd has the in-house capability to armour multicore electrical, optical and hybrid cables using galvanised/stainless steel or aluminium wire.

Galvanised steel or aluminium wire armour provides mechanical protection, which means the cable can withstand higher stresses, be buried directly and used in external underground and underwater projects.

Contra-helical armour is available for lifting and towing applications and to mitigate mechanical stresses in dynamic cables by providing a torque-balanced strength member.

Most power cables incorporate either a steel wire or aluminium armour. Armoured cable advantages include superior crush resistance, better cold impact and cold bend performance, and a broader range of acceptable installation practices.



Operations / steel wire armouring of subsea cable

Aluminium wire is similar in cost to steel wire armoured cable and offers the benefit of reduced weight. Both meet the same performance criteria, however some users prefer steel wire armour for certain applications as it provides more protection to the cable core.

Steel wire armour is particularly suited for small diameter/bend radius applications. The armour consists of strands of galvanized steel wire wound concentrically over an internal cable bundle. Two layers are wound (clockwise & anti-clockwise) for superior cut through resistance and pulling strength. Hydro Cable utilises different grades of steel for mechanical protection and dynamic cables, including Grades 34 and 65 (low) and Grade 1960 (high carbon).

### Certification

Hydro Group plc holds the certification approval to ISO 9001:2008 to design and manufacture specialist underwater and harsh environment armoured electrical and optical composite cables and umbilicals.

